City of Redmond 2012-2017 Transportation Improvement Program Adopted: July 19, 2011

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Six-Year Transportation Improvement Program (TIP) Overview

1. What is the Six-Year Transportation Improvement Program (TIP)?

The Six-Year Transportation Improvement Program, or TIP, is a short-range planning document that is annually updated based on needs and policies identified in the Redmond Comprehensive Plan and Transportation Facility Plan. It represents Redmond's current complete list of needed projects and programs for the next six years. The document also identifies secured or reasonably expected revenues and expenditures for each of the projects included in the TIP. Typically, projects listed in the first three years of the document are shown as having secured funding while projects in the last three years can be partially or completely unfunded.

2. What is included in the TIP?

The central part of the TIP is Appendix A – Project List, sorting projects into seven categories and detailing estimated project expenditures. All other portions of this document are meant to support and further clarify the Project List, especially Appendix C – Project Descriptions, providing the planned scope of the project.

A. Project Categories

Projects contained in Redmond's TIP are organized into seven categories. Two of the categories are titled *Preservation* and *Safety and System Management*. These categories are the most basic to any transportation plan. Preservation and Safety are designated as the two highest priorities for receiving funding in the Redmond Comprehensive Plan and Transportation Master Plan. Preservation projects maintain the existing transportation system by overlaying, rehabilitating, and reconstructing existing transportation facilities, such as pavement and bridges. Safety improvements use a variety of tools to help reduce and prevent traffic collisions. System Management projects are included in the Safety category because they improve the operation of the existing transportation system by making it operate more safely, reliably, and efficiently.

Four categories are titled *Major Street*, *Bikes and Pedestrians*, *Transit and High Occupancy Vehicles (HOV)* and *Transportation Demand Management*. Included in each of these categories are new projects that expand and improve existing facilities and services, or construct new pieces of our transportation system to make it easier to move around Redmond.

The *Planning* category sets the stage for all of the other project categories by helping the community, Council and City staff to identify, evaluate, prioritize and perform preliminary design and development for the transportation projects, programs and services provided by the City. This category includes transportation related subarea studies, corridor preliminary design studies, updates to the Transportation Master Plan (TMP) and Comprehensive Plan, and implementation of the TMP Three-year Priority Action Plan.

Programs are also included in their appropriate category. Programs are sources of ongoing funding used for collections of small projects throughout the City that help integrate the transportation system. These programs offer flexibility and responsiveness to immediate needs and opportunities, for example, the Neighborhood Traffic Calming Program. This program is a collaborative effort of City staff and local residents to identify traffic problems and develop solutions to reduce the impacts of traffic on neighborhoods.

B. Project Funding and Project Cost

The TIP Project List not only identifies the projects planned over the next six years, but it also reports the amount of funds currently allocated for each project during the years covered by the TIP. The estimated total project cost is also reported on the TIP Project List. To reduce confusion the total project cost for each project is included in the TIP even if the project was started prior to the first year covered in the TIP or the project is planned to continue beyond the final year covered in the TIP.

Planned expenditures for each project are summarized into four funding categories in Appendix A. These four funding categories represent the following revenue sources used to fund projects:

- 1. **Unfunded** The portion of the project cost planned for the six-years included in the TIP currently without approved funding.
- 2. **Local Funding** This includes the following funding categories:
 - a. **Funded by Other Local Jurisdictions** Funds that come from partnerships with other jurisdictions and organizations.
 - b. **Capital Investment Program (CIP)** The transportation portion of the CIP includes a variety of funding sources, including transfers from the City general fund, real estate excise tax, motor vehicle excise tax, motor vehicle fuel tax, sales tax on construction, and investment interest.
 - c. **Developer** Currently, the largest source of developer contribution is in frontage improvements, although supplemental mitigation has also been significant in recent years.
 - d. **Business Transportation Tax (Business License Surcharge)** \$56 per employee limited duration surcharge on Redmond's business license fees is earmarked for transportation projects.
 - e. **Impact Fees** Impact fees are assessed against building developments and improvements as they occur throughout the City.
 - f. **Other** Miscellaneous funding sources that do not fit into the categories above.
- 3. **Federal Funding** Federal grant funding is available through many competitive processes included in Federal transportation legislation.
- 4. **State Funding** State grant funding is available through a variety of competitive programs. The Transportation Improvement Board (TIB) administers many of these programs.

The Total Project Cost column included in Appendix A is based on varying levels of cost estimating. As the project moves from the planning level to a more detailed level of design, cost estimates are refined based on the more detailed information. The following defines the cost estimate types in order of increasing detail and certainty:

- 1. **Pre-Project Planning Estimate:** These project placeholders are allocations of funds used where a significant need has been identified, but planning efforts to develop a project scope are not yet significantly underway. Without some type of project scope it is very difficult to develop a detailed cost estimate. These cost estimates have the potential to change significantly as the project scope becomes more defined.
- 2. **Planning Level Estimate / Engineer Estimate:** These cost estimates are based on a generally defined scope that may include multiple alternatives. Cost estimates are usually based on limited fieldwork and general cost assumptions. No actual design work has been done prior to the development of these cost estimates. The cost estimate could still change significantly as design work begins but should be more reliable than the Pre-Project Planning Estimates.
- 3. **Preliminary Design Report:** These cost estimates are based on actual preliminary design work. If done for all facets of the project and there are not further additions to the project scope, these project estimates should represent a fairly dependable estimate of the total cost of the project.

Cost estimates are updated for projects as part of the TIP update, either because new cost estimating was done or the current estimate was inflated at 6.6% per year to the year work would begin on the project. The 6.6% annual inflation factor is based on an average of the change in the Washington State Department of Transportation (WSDOT) Construction Cost Index over the last 10 years. WSDOT does not provide a future forecast as part of the Construction Cost Index.

3. Developing the TIP

The annual TIP update starts with the previously adopted TIP. Projects in the previously adopted TIP are reviewed and projects that have been completed, or because of changing conditions, are no longer needed are removed from the TIP. The remaining projects carried over from the previous TIP are reviewed for changes to cost estimates, project funding, schedule, or scope during the update process to ensure that the best information is represented in the TIP.

New projects are generated from many sources, including appointed commissions and committees representing bicycles and pedestrians, parks, traffic safety, and trails; elected officials; City of Redmond staff; and other interested individuals and groups. In many cases, City of Redmond staff use tools such as the Redmond Pavement Management Program (RPM), analysis of accident data, and transportation modeling to help identify potential new projects. Potential new projects undergo a review of scope, priority, schedule, financing concepts, and compatibility with the Redmond Comprehensive Plan and Transportation Master Plan.

Updated projects from the previous TIP and new projects are then used to create a draft TIP project list. The phasing and funding of these projects in the draft TIP is based on an evaluation of project priority compared with priorities laid out in the Redmond Transportation Facility Plan, commitments to projects and programs that are already underway, partnerships the City has entered into with other jurisdictions and agencies, and new opportunities that arise to leverage local transportation funding in combination with other funding sources.

Once the draft TIP has been developed, a public hearing is held to provide an opportunity for the community comment. Based on the results of the public hearing and comments from the Redmond City Council a final version of the TIP is developed. This final version is then adopted by the City Council.

4. Relationship of the TIP to other Transportation Documents

A. Six-Year Capital Investment Program

Once adopted, the TIP helps to guide funding and implementation priorities during the development of the transportation portion of the 6-Year Capital Investment Program (CIP). The CIP is a six-year financial plan addressing capital needs and is updated along with the development of Redmond's biennial operating budget. The CIP can be considered a subset of the TIP. The CIP shows the City-funded portion of projects and is constrained by current budget forecasts, whereas the TIP shows the complete project list with the variety of funding sources and partners involved.

B. State and Federal Requirements

State law requires that each city develop a local TIP and that it be annually updated (RCW 35.77.010). It is also requires that projects be included in the TIP in order for cities to compete for transportation funding grants from most Federal and State sources. Federal grant funded and regionally significant projects from the first three years of the City's TIP are included in the Regional TIP, which is assembled by the Puget Sound Regional Council for King, Kitsap, Pierce, and Snohomish Counties. The regional TIPs (RTIP) from around the State are then combined to form the State TIP (STIP), which is approved by the Governor and then submitted to the Federal Highway Administration and Federal Transit Authority for their review and approval.

5. Future Updates

The TIP is an excellent guide to assist with planning transportation investments. The initiatives for next year's update remain much the same as the prior year.

- Review and update cost estimates included in the TIP.
- Further develop program reporting as part of TIP.

6. Contact Information

Should you have questions or wish further information, please contact either of the following City staff:

Don Cairns, Transportation Services Manager, (425) 556-2834, dcairns@redmond.gov Joel Pfundt, Principal Planner, (425) 556-2750, jpfundt@redmond.gov

Appendix A - Project List (Exhibit A)

All Six-Year TIP projects and programs are arranged into seven categories: *Bikes and Pedestrians, Major Streets, Planning, Preservation, Safety and System Management, Transit and HOV* and *Transportation Demand Management*. Projects and programs are classified in the category that best represents the project, in many cases projects and programs make improvements for multiple categories. The types of projects and programs included in each of these categories are described below:

- **Bikes and Pedestrians (B)** Projects that focus on making the community more safe and accessible for non-motorized modes of transportation.
- **Major Street (C)** Large street projects that include significantly modifying a street section. These projects usually include some combination of the following: additional traffic lanes, additional turn lanes at intersections, bridges, new/modification of traffic signals, bike lanes, planter strips, medians, sidewalks, and/or trails.
- **Planning (L)** Transportation related planning and preliminary design studies that result in the prioritization, identification and early development of future transportation projects, programs and services.
- **Preservation** (**P**) Projects that maintain the existing transportation system by overlaying, rehabilitating, and reconstructing existing transportation facilities, such as pavement and bridges.
- Safety and System Management (S) Projects that improve the operation of the existing transportation system by making it operate more safely, reliably, and efficiently.
- **Transit and HOV (T)** Projects that improve the attractiveness of using transit and high occupancy vehicles (HOV) by increasing reliability and decreasing travel time.
- Transportation Demand Management (M) Programs that improve existing transportation system efficiency by altering transportation system demand through management of pricing, services, employer incentives such as staggered work hours and telecommuting, and regulations, rather than capital improvements.

	Street or Project				Proi	Proi		Six-Year P (All D	Total		
		From	То	Start	End	Un Funded	Local Funding	Federal Funding	State Funding	Total Funding	Project Cost *
	BIKES AND PEDESTRIANS										
B1	Bicycle Facilities Improvement Program			2012	2017		2,650			2,650	2,650
B2	Sidewalk Improvement Program			2012	2017		8,700			8,700	8,700
B19	Puget Sound Energy Trail, Rose Hill Extension	132nd Avenue NE	Willows Road	2016	2017	1,250				0	1,250
B23	Redmond Way Sidewalk	142nd Avenue NE	145th Avenue NE	2016	2017	1,900				0	1,900
B31	Bear Creek Trail Connector, Redmond Town Center to Marymoor Park	Redmond Town Center	Marymoor Park	2015	2016	2,350				0	2,350
B34	Sidewalk on Willows Rd from NE 117th St to NE 118th St	NE 117th St	NE 118th St	2012	2012		46			46	46
B35	Sidewalk on 185th Ave NE from NE 67th St to NE 68th St	NE 67th St	NE 68th St	2012	2012		54			54	54
B36	Redmond Central Connector	Sammamish River	Bear Creek Trail near SR 520	2012	2012		1,600	2,300	850	4,750	4,750
B37	520 Trail Grade-Separation at NE 40th St	520 Bike Trail	520 Bike Trail	2017	2017	5,000				0	5,000
B38	Redmond Central Connector, Sammamish Valley Section	Sammamish River Trestle	NE 95th Street	2016	2017	7,000				0	7,000
B39	148th Ave NE Multi-use Path over SR 520	SR 520 Trail/Eastbound SR 520 ramps	Westbound SR 520 ramps	2016	2017	7,900				0	7,900
										16,200	41,600
	MAJOR STREET										
C16	160th Avenue NE Extension	NE 98th Street	Red-Wood Road	2015	2017	33,000				0	33,000
C18	NE 116th Street Widening	167th Place NE	179th Place NE	2015	2016	10,000				0	10,000
C39	164th Avenue NE Extension	NE 76th Street	Cleveland Street	2012	2013		3,500			3,500	3,500
C43	Union Hill Road Widening, Phase 3	188th Avenue NE	East City Limits	2013	2014	2,500	500			500	3,000
C44	Redmond Way & 140th Ave NE Intersection Widening	Redmond Way	140th Ave	2014	2015		1,700			1,700	1,700
C45	Bellevue-Redmond Rd & 156th Ave NE Intersection Widening	Bellevue-Redmond Rd	156th Ave	2014	2015		450			450	450
											l

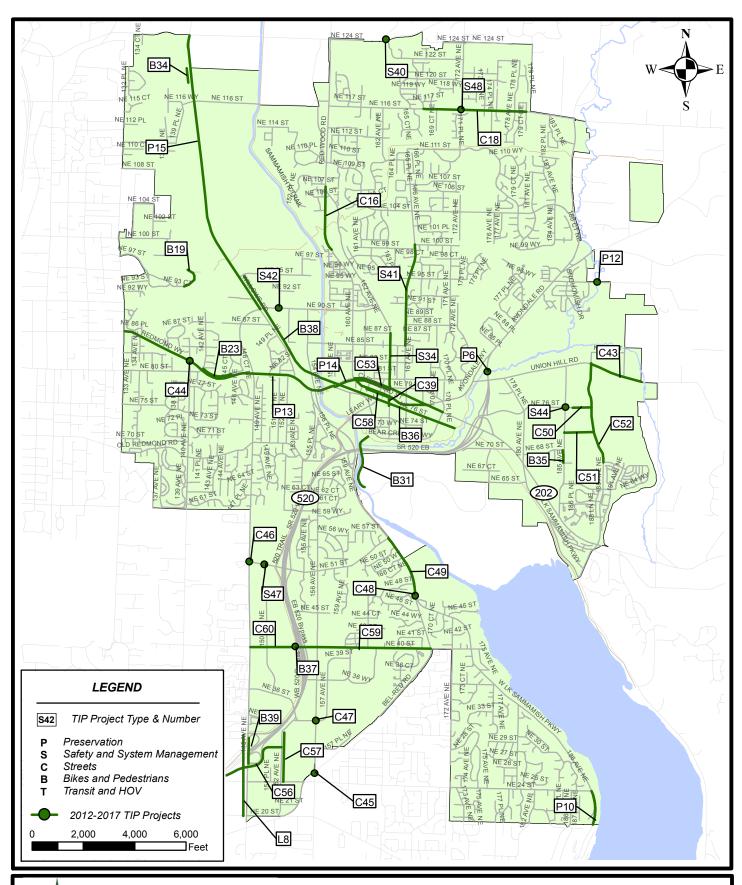
	Street or Project		Proj	Proj			roject Funding ollars in Thous		Total		
		Street or Project Fro	From	То	Start	End	Un Funded	Local Funding	Federal Funding	State Funding	Total Funding
C46	NE 51st St & 148th Ave NE Intersection Improvements	51st Street	148th Ave	2014	2015		1,450			1,450	1,45
C47	NE 31st St and 156th Ave NE Intersection Widening	31st Street	156th Avenue	2014	2014		1,450			1,450	1,45
C48	Bellevue-Redmond Rd and West Lake Sammamish Parkway Roundabout	Bellevue-Redmond Rd	West Lake Sammamish Parkway	2015	2016	11,400				0	11,40
C49	West Lake Sammamish Parkway NE Widening	Bel-Red Road	NE 51st Street	2017	2017	28,450				0	28,450
C50	NE 76th Street Extension	185th Ave NE	188th Ave NE	2014	2015		8,800			8,800	8,80
C51	NE 73rd Street Extension	185th Ave NE	188th Ave NE	2016	2017		12,500			12,500	12,500
C52	188th Ave NE Extension	NE 68th Street	Union Hill Road	2014	2015		19,000			19,000	19,00
C53	Redmond Way and Cleveland Street One Way Couplet Conversion	160th Avenue NE	170th Avenue NE	2015	2016	14,400				0	14,400
C56	Overlake Access Ramp	SR 520	152nd Avenue NE	2014	2017	53,100				0	53,100
C57	152nd Avenue NE Improvements, Phase 1	NE 24th Street	Ne 31st Street	2015	2017	24,000				0	24,000
C58	Cleveland Street Streetscape	160th Ave NE	170th Ave NE	2012	2014	1,950	2,950			2,950	4,900
C59	NE 40th Street Improvements, Phase 1	156th Ave NE	Bel-Red Rd	2014	2014	200				0	200
C60	NE 40th Street Improvements, Phase 2	148th Ave NE	156th Ave NE	2015	2016	2,000				0	2,000
										52,300	233,300
	PLANNING										
L5	Transportation Master Plan Update			2012	2012		840			840	840
L8	148th Avenue NE Corridor Master Plan	Bellevue-Redmond Road	SR 520 Interchange	2013	2013		500			500	500
L9	Sound Transit East Link			2012	2012		300			300	300
L11	SR 520 Corridor Planning Study			2015	2015				500	500	500
										2,140	2,140
	PRESERVATION										
P1	Pavement Management Program			2012	2017		7,000			7,000	7,000

	Street or Project			Droi:	Proj			roject Funding ollars in Thous			Total
		From To	Proj Start	End	Un Funded	Local Funding	Federal Funding	State Funding	Total Funding	Project Cost *	
P2	Bridge Repair Program			2012	2017		450			450	450
P6	Avondale Road Bridge Rehabilitation at Bear Creek	Avondale Road	Bear Creek	2015	2015		100			100	100
P10	West Lake Sammamish Parkway Rehabilitation	South City Limits	NE 24th Street	2017	2017	950				0	950
P12	NE 95th Street Bridge Replacement	Bear Creek	Bear Creek	2016	2016		380			380	380
P13	Redmond Way Overlay Phase 1	132nd Ave NE	Bear Creek Parkway	2012	2012		40	2,108	43	2,191	2,191
P14	Redmond Way Overlay Phase 2	Bear Creek Parkway	164th Ave NE	2013	2014			494	10	504	504
P15	Willows Road Rehabilitation	NE 90th Street	NE 124th Street	2016	2017	900	200			200	1,100
										10,825	12,675
	SAFETY AND SYSTEM MANAGEMENT										
S1	Neighborhood Traffic Calming Program			2012	2017		900			900	900
S2	Channelization Improvement Program			2012	2017		450			450	450
S4	Engineering Contingency Program			2012	2017		600			600	600
S5	Street Lighting Improvement Program			2012	2017		300			300	300
S7	Utility Undergrounding Program			2012	2017		300			300	300
S29	Transportation Concurrency Management Program			2012	2017		600			600	600
S34	164th Avenue NE Rechannelization	NE 80th Street	NE 87th Street	2012	2013		106		400	506	506
S38	Targeted Safety Improvement Program			2012	2017		3,150			3,150	3,150
S40	NE 124th Street at 162nd Place NE Intersection Improvements	NE 124th Street	162nd Place NE	2016	2017	3,800				0	3,800
S41	166th Avenue NE Rechannelization	NE 85th Street	NE 100th Street	2012	2015	265	35			35	300
S42	NE 90th Street at 151st Avenue NE Traffic Signal	NE 90th Street	151st Avenue NE	2017	2017	500				0	500
S44	NE 76th St and 185th Ave NE Traffic Signal	NE 76th Street	185th Avenue NE	2014	2015		650			650	650

		Proj	Proi	Proj			roject Funding Pollars in Thous		Total		
	Street or Project	From	То	Start	End	Un Funded	Local Funding	Federal Funding	State Funding	Total Funding	Project Cost *
S46	Street Signage Upgrades to Meet New Standards			2015	2016	1,250				0	1,250
S47	NE 51st Street at 150th Avenue NE Traffic Signal	NE 51st Street	150th Avenue NE	2015	2015		700			700	700
S48	NE 116th Street and 172nd Roundabout	NE 116th Street	172nd Avenue NE	2014	2015		4,300			4,300	4,300
	TRANSIT AND HOV									12,491	18,306
T12	Shuttle & Transit Service Program			2012	2017	2,518	513			513	3,031
	TRANSPORTATION DEMAND MANAGE	MENT								513	3,031
M1	Redmond Trip Reduction Incentive Program (R-TRIP)			2012	2017	7,608	1,460			1,460	9,068
M6	Parking Management Demonstration Program			2012	2017	710				0	710
M7	Transportation Management Programs (TMP's), Administration and Maintenance			2012	2017	165				0	165
M13	Citywide Commute Trip Reduction (CTR) Program			2012	2017	670	203			203	873
M14	Growth and Transportation Efficiency Center Implementation			2012	2017	1,500	500			500	2,000
M15	Demand Management Capital Improvements			2012	2017	510	550			550	1,060
										2,713	13,876
				i i	TOTAL	227,746	90,477	4,902	1,803	97,182	324,928

Appendix B - Project Location Map

This map represents all of the projects that can be mapped from the TIP. Projects that were not mapped include programs and planning studies (e.g. Transportation Demand Management, pavement management, Transportation Master Planning).





12-17 TIP

July 19, 2011
2012-2017 Transportation Improvement Program

Appendix C - Project Descriptions

More detailed project descriptions are provided in this section for the projects included in the TIP.

BIKES AND PEDESTRIANS

B1 <u>Bicycle Facilities Improvement Program</u>

Improve and complete the City's bicycle plan in accordance with the plan and priorities in the TMP. This program provides new bike connections, improves transit access by bike and enhances energy efficiency.

B2 Sidewalk Improvement Program

Complete the missing links in the sidewalk system in accordance with the TMP to provide new pedestrian connections in and between neighborhoods, improve transit access, improve pedestrian safety and enhance an energy efficient transportation alternative to driving.

B19 Puget Sound Energy Trail, Rose Hill Extension

Extend paved Puget Sound Energy Trail from its terminus west of Willows Road to NE 93rd Ct, which connects to 132nd Ave NE.

B23 Redmond Way Sidewalk

Construct new sidewalk on one side of Redmond Way from 142nd Ave NE to 145th Ave NE. Preference is for construction on north side of street because it will provide a more contiguous sidewalk network.

B31 Bear Creek Trail Connector, Redmond Town Center to Marymoor Park

Construct paved multi-use trail that would cross over Bear Creek on a new bridge and pass under SR 520 on the east side of the Sammamish River connecting Downtown Redmond neighborhood directly to Marymoor Park.

B34 Sidewalk on Willows Rd from NE 117th St to NE 118th St

Extend existing sidewalk north to additional employment area by constructing a new section of sidewalk on Willows Rd from NE 117th St to NE 118th St. This will improve pedestrian and transit access by providing access to existing sidewalk and the traffic signal at NE 116th St to facilitate improved crossings.

B35 Sidewalk on 185th Ave NE from NE 67th St to NE 68th St

Construct a new sidewalk on 185th Ave NE from 67th St to NE 68th St to improve pedestrian and transit access to businesses in the area.

B36 Redmond Central Connector

Design and construct 1.1 miles of hard-surfaced trail along the former BNSF railroad corridor. The project will have side trails and street connections, and will be based on the Redmond Central Connector Master Plan.

B37 520 Trail Grade-Separation at NE 40th St

Grade separate 520 Trail at NE 40th St to improve bicycle and pedestrian access along the 520 Trail, reduce conflicts between vehicles and nonmotorized users and improve vehicle operations at the intersection.

B38 Redmond Central Connector, Sammamish Valley Section

Extend the Redmond Central Connector to 95th Street. Rebuild or replace the old rail trestle over the Sammamish River to meet current standards.

B39 <u>148th Ave NE Multi-use Path over SR 520</u>

Modify channelization and signals, and provide wide multi-use trail that is separated from the roadway on the east side of 148th Ave NE to provide a better nonmotorized connection across SR 520.

MAJOR STREET

C16 160th Avenue NE Extension

Construct new 160th Ave NE from current terminus at approximately NE 99th St north to the street in the Redmond 74 Development. Project would modify 156th Ave NE with the Redmond 74 development from the terminus to Red-Wood Rd. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, right of way and easement acquisition.

MAJOR STREET

C18 NE 116th Street Widening

Based on the design report for this section of roadway, construct the portions of this roadway not completed by the subdivision developers or the fire station project.

C39 164th Avenue NE Extension

Construct new 164th Ave NE from NE 76th St to Cleveland St based on results of Downtown East-West Corridor Study and Redmond Central Connector Master Plan. Improvements include 1 through lane in each direction, bike lanes, parking, sidewalks, street lights, and storm drainage.

C43 <u>Union Hill Road Widening, Phase 3</u>

This project constructs a five-lane roadway section including bike lanes and sidewalks between 188th Ave. NE and the east city limits. It is the final phase of the project and will fix bottleneck being created by Union Rd Widening being done as part of the 196th Ave NE Extension project.

C44 Redmond Way & 140th Ave NE Intersection Widening

Convert northbound lanes to one left turn lane and one left, through, right turn lane and add bike lane.

C45 Bellevue-Redmond Rd & 156th Ave NE Intersection Widening

Construct a southbound right-turn lane. Construction planned to begin after the construction of at least 1,400,000 net new gross square feet on the Main campus, or sooner at Microsoft's option.

C46 NE 51st St & 148th Ave NE Intersection Improvements

Improve traffic flow through intersection modifications and widening as part of redevelopment.

C47 NE 31st St and 156th Ave NE Intersection Widening

Construction additional westbound left-turn lane. Beginning of construction planned to coincide with the earlier of the internal Main Campus realignment of 157th Ave NE between NE 31st St and 159th Ave NE, or concurrent with the construction of 1,000,000 new gross square feet on the Main Campus.

C48 Bellevue-Redmond Rd and West Lake Sammamish Parkway Roundabout

Project includes removing exiting traffic signal at Bel-Red Road and West Lake Sammamish intersection. Install 2-lane roundabout at Bell-Red Road, West Lake Sammamish intersection and improve pedestrian facilities.

C49 West Lake Sammamish Parkway NE Widening

Project includes intersection widening at NE 51st St. to increase capacity. The intersection widening project is a BROTS project. The cross section of West Lake Sammamish Parkway between the two intersections will be evaluated to determine the short-term and long-term needs to increase the through lanes from one lane in each direction to two lanes in each direction. Left turn lanes will be provided where necessary and improvements will be made to bicycle and pedestrian facilities, including extending the multi-use path on the east side of West Lake Sammamish Parkway.

C50 NE 76th Street Extension

Construct new NE 76th St from 185th Ave NE to 188th Ave NE. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, sidewalks, street lights, traffic control, storm drainage, right-of-way and easements.

C51 NE 73rd Street Extension

Construct new NE 73rd St for neighborhood access and circulation from 185th Ave NE to 188th Ave NE. Improvements include 1 through lane in each direction, left turn lanes, sidewalks, streets lights, traffic control, storm drainage, right-of-way and easements.

C52 188th Ave NE Extension

Construct new 188th Ave NE arterial from NE 68th St to Union Hill Rd. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, right-of-way and easement acquisition.

MAJOR STREET

C53 Redmond Way and Cleveland Street One Way Couplet Conversion

Convert Redmond Way from 160th Ave NE to Avondale Way to 1 through lane in each direction and center turn lane with west end having two westbound starting at 161st Ave NE and east end having two eastbound lanes starting at 168th Ave NE. Convert Cleveland St to 1 through lane in each direction. A realignment of the streets at eastern and western ends will improve traffic flow and include gateway treatments. Pedestrian improvements will be constructed on Redmond Way.

C56 Overlake Access Ramp

Construct eastbound access ramp from SR 520 to 152nd Ave NE at 148th Ave NE Interchange. Ramp would diverge from eastbound 148th Ave NE off-ramp, be grade-separated from 148th Ave NE and connect with 152nd Ave NE at roughly NE 29th St. The ramp would include 1 general purpose lane, and auxiliary lanes and HOV/Transit treatments as applicable.

C57 <u>152nd Avenue NE Improvements, Phase 1</u>

The 152nd Ave NE Corridor Study will determine a final cross section for 152nd Ave NE corridor as well as 151st Ave NE. The 152nd Ave NE cross section will include one through lane in each direction, turn lanes, bike lanes, on-street parking, sidewalks and additional pedestrian amenities. In addition the corridor study is proposing east-west connecting streets to complete a grid system for enhanced mobility including transit access to all modes.

C58 <u>Cleveland Street Streetscape</u>

In advance of the conversion of Redmond Way/Cleveland St Couplet Conversion back to two-way operation construct curb extensions, wide sidewalks, pedestrian amenities and gateway treatments. The project will focus on the area between Brown St and 164th Ave NE.

C59 NE 40th Street Improvements, Phase 1

Improve NE 40th Street for non-motorized modes by a combination of techniques, including modifications to curb returns and restriping the roadway with narrower lanes.

C60 NE 40th Street Improvements, Phase 2

Improve NE 40th Street for non-motorized modes by a combination of techniques, including leading pedestrian intervals, pedestrian warning signs, modifications to curb returns and restriping the roadway with narrower lanes.

PLANNING

L5 <u>Transportation Master Plan Update</u>

The Transportation Master Plan (TMP) which was adopted in 2004 included a planned update starting in 2010. With the completion of the Three-Year Action Plan the focus will turn towards data collection for the five year tracking measures included in the TMP, evaluation of the implementation of the 2004 TMP and the TMP update in coordination with the update of the Redmond Comprehensive Plan update.

L8 <u>148th Avenue NE Corridor Master Plan</u>

In a partnership with the City of Bellevue develop a corridor master plan for 148th Ave NE. The corridor master plan will complete a preliminary design for the corridor, which will add vehicle capacity to accommodate anticipated future growth in the corridor. The corridor master plan would include sidewalk and landscaping improvements; low impact development techniques, including ways to accommodate stormwater; and take into consideration existing and planned land uses along the corridor. It would also be developed in coordination with Sound Transit's future light rail alignment.

PLANNING

L9 Sound Transit East Link

Sound Transit is rapidly designing East Link light rail into Overlake and then into Downtown. This effort requires substantial City attention to Sound Transit's design to achieve a light rail system that is consistent with Redmond's interests. Consultants and City staff will focus on: station access (e.g. pedestrian and bike facilities, additional street and access connections, and transit), station design, transit oriented development feasibility, how the system will fit with future development, and efforts to extend light rail to Downtown Redmond.

L11 SR 520 Corridor Planning Study

City of Redmond will partner with WSDOT and other stakeholders to establish a preliminary design for the SR 520 corridor from I-405 in Bellevue to the freeway terminus area in Redmond where the freeway integrates with major local arterials and SR 202. Using the latest employment and population forecasts and context sensitive solutions, the Corridor Planning Study (CPS) will address multimodal mobility deficiencies and operational impacts including SOV, HOV, transit, bike, and pedestrians. The CPS will determine the ultimate footprint, project phasing and operation of multimodal corridor improvements.

PRESERVATION

P1 Pavement Management Program

Addresses routine pavement needs, including an annual inventory, outreach, street overlays, and major maintenance for the 130 + miles of pavement throughout the City. Rehabilitation of principal arterials is addressed through specific project allocations.

P2 <u>Bridge Repair Program</u>

Annual inspection and minor maintenance required to keep the city's bridges operating without disruptions.

P6 Avondale Road Bridge Rehabilitation at Bear Creek

The yearly inspection of this bridge in conjunction with the bridge inventory process determines the need for bridge repair. The bridge will eventually need pile reinforcement and bank stabilization.

P10 West Lake Sammamish Parkway Rehabilitation

Reconstruct portions of roadway and provide overlay. Make drainage improvements where needed and provide non-motorized facilities where feasible within the scope of the project. Project will be coordinated with planned improvements by City of Bellevue.

P12 <u>NE 95th Street Bridge Replacement</u>

The NE 95th Street Bridge over Bear Creek is a 20 foot span wooden bridge that needs to be replaced because of deteriorating wood and the short span is constricting a major salmon stream and does not meet State Requirements. The replacement will be a 40 foot span concrete structure.

P13 Redmond Way Overlay Phase 1

This project repairs fatigued pavement areas, includes a two inch thick HMA overlay, and the replacement of all channelization and signal loops on Redmond Way from 132nd Avenue NE to Bear Creek Parkway.

P14 Redmond Way Overlay Phase 2

This project repairs fatigued pavement areas, includes a two inch thick asphalt overlay, and the replacement of all channelization and signal loops on Redmond Way and Cleveland Street from Bear Creek Parkway to 164th Avenue NE. This work may be done in conjunction with other resurfacing work as part of the Couplet Conversion.

P15 Willows Road Rehabilitation

This project repairs fatigued pavement areas, includes a two inch thick HMA overlay, and the replacement of all channelization and signal loops on Willows Road from NE 90th Street to NE 124th Street. In addition, examine restriping existing roadway to improve efficiency.

SAFETY AND SYSTEM MANAGEMENT

S1 Neighborhood Traffic Calming Program

Annual investment to improve safety in residential areas through community meetings, enforcement, and physical devices (i.e. speed humps) to address issues of excessive speeding, high volumes, and concerns for children and pedestrians.

S2 <u>Channelization Improvement Program</u>

Upgrading and replacing existing markings, and adding new markings at intersections using long lasting materials to improve safety and durability.

S4 <u>Engineering Contingency Program</u>

Provides funding for miscellaneous engineering and construction tasks at various sites to ensure the City is prepared for emergency situations and can maintain system efficiency.

S5 <u>Street Lighting Improvement Program</u>

Improve street lighting throughout the City to maintain a safe nighttime environment for walking, biking, and driving.

S7 <u>Utility Undergrounding Program</u>

Helps implement a code requirement to underground selected overhead utilities, such as power, telephone, and television cable to improve reliability and aesthetics of utilities.

S29 <u>Transportation Concurrency Management Program</u>

Ensures that data and analysis tools are up-to-date and coordinated with regional partners to reduce cost and increase efficiency.

S34 <u>164th Avenue NE Rechannelization</u>

Rechannelize street to one through lane in each direction, two-way left-turn lane, and bike lanes.

S38 <u>Targeted Safety Improvement Program</u>

Annual construction of improvements to ensure the highest priority safety needs are regularly met for all travel choices.

S40 <u>NE 124th Street at 162nd Place NE Intersection Improvements</u>

Install traffic signal and add left turn lanes on 124th Ave NE at 162nd PI NE.

S41 166th Avenue NE Rechannelization

Rechannelize to a cross section that includes 1 through lane in each direction, a center two-way left-turn lane and bike lanes.

S42 NE 90th Street at 151st Avenue NE Traffic Signal

Install traffic signal at NE 90th Street and 151st Avenue NE.

S44 NE 76th St and 185th Ave NE Traffic Signal

Install new traffic signal at intersection of NE 76th St and 185th Ave NE.

S46 Street Signage Upgrades to Meet New Standards

The Federal Government adopted a new version of the MUTCD in 2009, which requires public agencies in the United States to upgrade all of their street name signs to a larger sign, larger font, and mixed case rather than all capital lettering.. WSDOT is required to update standards and requirements per the Manual on Uniform Traffic Control Devices (MUTCD) .

S47 NE 51st Street at 150th Avenue NE Traffic Signal

Install traffic signal at the intersection of NE 51st St and 150th Ave NE.

S48 NE 116th Street and 172nd Roundabout

Construct roundabout to improve safety and access, supporting the future widening of NE 116th Street.

TRANSIT AND HOV

T12 Shuttle & Transit Service Program

Expand local and transit shuttle service, extending to areas outside Willows and SE Redmond, with an emphasis on Overlake. Continue to work with King County Metro to identify potential new routes and partnership opportunities to add new service.

TRANSPORTATION DEMAND MANAGEMENT

M1 Redmond Trip Reduction Incentive Program (R-TRIP)

The Redmond Trip Reduction Incentive Program (R-TRIP) provides grant funding and staff assistance to Redmond businesses to implement or enhance employee commute trip reduction programs. Direct to commuter incentives, small business assistance, employee recognition, residential programs, and new TDM initiatives are included.

M6 <u>Parking Management Demonstration Program</u>

The Parking Management Demonstration Program is intended to demonstrate various parking management and monitoring programs and to form parking partnerships to better manage parking supply. Downtown and Overlake are the emphasis areas.

M7 Transportation Management Programs (TMP's), Administration and Maintenance

Provide annual program review and notifications, and negotiate updates to development required TMP's when initiated by building owner.

M13 <u>Citywide Commute Trip Reduction (CTR) Program</u>

Administers and implements the Citywide commute trip reduction (CTR) program (state mandate)

M14 Growth and Transportation Efficiency Center Implementation

Implements Growth and Transportation Efficiency Center (G-TEC) program as an enhancement to CTR and R-TRIP(M1 and M13) that leverages additional State and local funding to provide enhanced commute trip reduction infrastructure, marketing and implementation support and increased incentives for reducing commute trips and improving alternative transportation and mobility in urban centers.

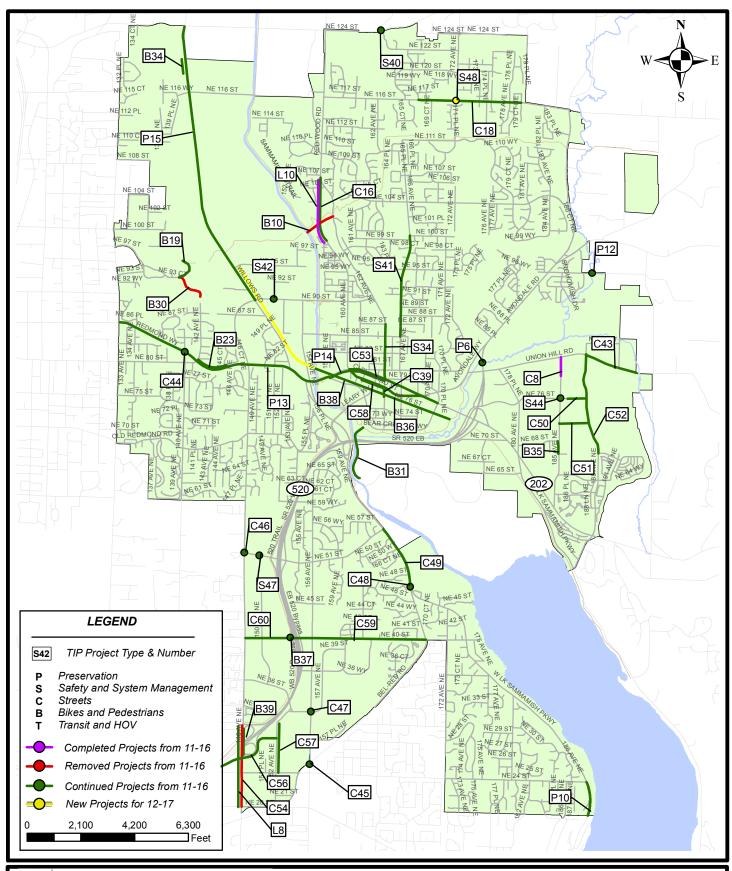
M15 <u>Demand Management Capital Improvements</u>

This project provides funding for capital-oriented projects and programs that support TDM goals and are located within the public right-of-way. It also provides opportunities for seedfunding to employers in Redmond to partner with local and regional transit agencies to provide new or enhanced infrastructure to support transit and alternative mode use, as well as for the "myR-TRIP" online commute management system. Transit shelters, concrete pads, benches, drinking fountains, lighting, crossing aids, commute management system, and other amenities like off-street parking options that support transit and other alternative mode use could be eligible for funding.

Appendix D - TIP Update Map

The TIP Update Map shows how this year's TIP has changed from last year. There are four categories, Completed Projects, Removed Projects, Continued Projects, and New Projects, which are described below.

- *Completed Projects* are anticipated to be built by the end of 2011, so will not be included in this year's TIP.
- Removed Projects will no longer be constructed within the foreseeable next six years. While they do not appear on the current TIP, they may be brought into a future TIP when it seems likely the project will be built in a six year time frame.
- *Continued Projects* were not completed or removed, and move from the previous TIP to the current TIP. Some minor modifications to the scope and costs may occur.
- *New Projects* appear for the first time in the new TIP.





TIP Update Map

July 19, 2011

2012-2017 Transportation Improvement Program

Appendix E - Transportation Planning Document Relationship Diagram

The purpose of Figure 1 is to illustrate the relationship between some of the key planning and financial documents that are used in transportation planning. The figure is designed so that the long-range planning documents are at the top and progress down towards implementation and construction of particular projects and programs. A brief description of each document is included below.

Transportation Master Comprehensive Plan Plan (TMP) Transportation Facilities Plan (TFP) **6-Year Transportation Improvement Program Emergencies** (TIP) and **Opportunities** Transportation Capital **Investment Program** (CIP) Developer or Outside City Designs and Agency Designs and Constructs Specific Constructs Projects **Projects**

Figure 1 - Transportation Planning Flow Chart

Transportation Planning Flow Chart Definitions

• Transportation Master Plan (TMP) and Comprehensive Plan: These documents include the vision, strategies, and ultimate transportation plan for the community.

- Transportation Facilities Plan (TFP): Facilities elements of Comprehensive Plan modeled to balance planned concurrency with target land use for target year. These are updated periodically and at five-year intervals.
- **6 -Year Transportation Improvement Program (TIP):** Annually updated plan for all committed and needed improvements in the next six years. Required by RCW.
- Capital Investment Program (CIP): City funded projects updated with the twoyear budget cycle.
- **Developers and Outside Agency Designs and Constructs Projects:** Projects constructed and paid for by developers and outside agencies (e.g. WSDOT, Sound Transit, and Bellevue). In some cases the City contributes some funding to these projects.
- **City Designs and Constructs Specific Projects:** These are the individual CIP projects that the City of Redmond designs and builds.

NOTES:

- 1. Council approves every step of the process from the Transportation Master Plan through acceptance of construction of city projects.
- 2. In addition to the Transportation Facilities Plan, the City of Redmond Comprehensive Plan and Transportation Master Plan include several other key elements such as: Vision, Goals, Policies, modal elements, performance monitoring, regional transportation, 3-year Priority Action Plan and Thoroughfare Plan.